

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Use of the 5.850-5.925 GHz Band)	ET Docket No. 19-138
)	
)	

OPPOSITION TO PETITION FOR STAY

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Pursuant to Section 1.45(d) of the Commission’s rules,^{1/} Wi-Fi Alliance^{2/} hereby opposes the Petition for Stay^{3/} of the Amateur Radio Emergency Data Network (“AREDN” or “Petitioner”) of the unanimous November 18, 2020, Report and Order (“*5.9 GHz Order*”) in the above-referenced proceeding.^{4/} In determining whether to grant “the extraordinary remedy of a stay,”^{5/} the Commission applies a stringent four-prong test – issuing a stay only if a Petitioner

^{1/} 47 C.F.R. § 1.45(d).

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^{3/} Petition for Stay of Amateur Radio Emergency Data Network, ET Docket No. 19-138 (filed May 3, 2021) (“Petition”); Petition for Reconsideration of Amateur Radio Emergency Data Network, ET Docket No. 19-138, at 8-16 (filed May 3, 2021) (“AREDN Petition for Recon.”) (incorporating by reference pages from the AREDN Petition for Recon. in the Petition).

^{4/} *Use of the 5.850-5.925 GHz Band*, First Report and Order, Further Notice of Proposed Rulemaking and Order of Proposed Modification, 35 FCC Rcd 13440 (2020) (“*5.9 GHz Order*”); *Use of the 5.850-5.925 GHz Band*, Erratum, ET Docket No. 19-138, DA 21-136 (rel. Feb. 9, 2021); *Use of the 5.850-5.925 GHz Band*, Erratum, ET Docket No. 19-138 (rel. Dec. 11, 2020).

^{5/} *Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless*

can demonstrate that: (1) it is likely to prevail on the merits; (2) it will suffer irreparable harm absent a stay; (3) other interested parties will not be harmed if the stay is granted; and (4) the public interest would favor a grant of the stay.^{6/} For the reasons explained below, AREDN fails to satisfy any of these criteria, and the Commission should therefore promptly deny the Petition.

I. INTRODUCTION AND SUMMARY

Additional unlicensed spectrum capacity is needed to support the Nation's telecommunications infrastructure and to allow Americans to remain connected, a need that has become even more evident during the ongoing pandemic. The *5.9 GHz Order* helps meet these urgent requirements by reallocating a 45 megahertz portion of the 5.850-5.925 GHz ("5.9 GHz") band for unlicensed devices while continuing to reserve a portion for innovation in intelligent transportation systems ("ITS"). The Commission's carefully considered decision advances the public interest by promoting the most effective use of a precious spectrum resource that has lay fallow for too long.

AREDN seeks to impede the Commission's important action. But AREDN's Petition should be promptly rejected. *First*, AREDN fails to demonstrate that it will likely prevail on the merits of the Petition. Contrary to AREDN's assertions, the Commission has broad, exclusive authority to manage spectrum designated for non-federal operations under the Communications Act and therefore was well within its ability to reallocate the 5.9 GHz band. Contrary to AREDN's assertions, the *5.9 GHz Order* does not seek or even attempt to exercise any authority

Siting Proposals as Requiring a Variance, Order, 25 FCC Rcd 1215, ¶ 7 (2010) ("2010 Siting Review Order").

^{6/} *Washington Metro Area Transit Comm'n v. Holiday Tours, Inc.*, 559 F.2d 841, 843-44 (D.C. Cir. 1977); *Updating the Intercarrier Compensation Regime to Eliminate Access Arbitrage*, Order Denying Stay Petition, 34 FCC Rcd 9584, ¶ 6 (2019); *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, et al.*, Order Denying Stay, 11 FCC Rcd 11754, ¶ 7 (1996); *2010 Siting Review Order* ¶ 7.

over the Nation's ITS standards or architecture. Rather, the Commission simply elected to repurpose one part of a spectrum band and update its rules to reflect the technology that is expected to be used in the band.

Second, AREDN fails to demonstrate that it would suffer *any* harm as a result of the 5.9 GHz Order absent a stay. Not only did the Commission fully address any potential interference to Amateur Service operations from indoor-only unlicensed devices in the 5.9 GHz band, but it also deferred consideration of outdoor devices to a later date. AREDN offers no evidence of why the Commission's interference analysis was inaccurate. Instead, it relies on irrelevant analogies to outdoor devices and speculative harms that are neither immediate nor irreparable.

Third, granting AREDN's Petition will harm other interested parties. There is an ever-increasing demand for spectrum to operate unlicensed devices using such technologies as Wi-Fi, accelerated by the pandemic. The Commission correctly recognized that additional spectrum is necessary to not only meet, but to stay ahead of connectivity demands.^{7/} Preventing use of the 5.9 GHz band now would substantially harm consumers whose demand for wireless broadband has grown at a phenomenal pace.

Finally, the public interest favors denying the Petition. The Commission carefully considered the record and determined, based on sound analysis that the American public was best served by repurposing the 5.9 GHz band, which has remained woefully underutilized since its initial allocation over 20 years ago. That decision was the right decision, and AREDN should not be allowed to delay it.

^{7/} See 5.9 GHz Order ¶ 15.

II. AREDN WILL NOT PREVAIL ON THE MERITS

A. The Commission Has Broad Authority to Manage Spectrum Allocated for Non-Federal Use

AREDN asserts that it is likely to succeed on the merits of its Petition because the Commission did not have the authority to issue the *5.9 GHz Order* and its decision is “inconsistent with law.” AREDN misconstrues both the Commission’s authority and the “law.” Congress delegated to the Commission broad authority to regulate spectrum allocated for non-federal operations.^{8/} Courts have long recognized the Commission’s expertise regarding spectrum management and frequently defer to its public interest decisions concerning spectrum issues.^{9/}

Consistent with that authority, the Commission repurposed the 5.9 GHz band by authorizing indoor unlicensed operations in the lower 45 megahertz while reserving the remaining upper 30 megahertz for safety-related ITS.^{10/} The Commission based its decision on a determination that this spectrum – which was previously reserved entirely for Dedicated Short-Range Communications (“DSRC”) operations, but remained mostly unused – would better serve

^{8/} See generally 47 U.S.C. §§ 151, 301. See also *FCC v. Nextwave Personal Communications, Inc.*, 200 F.3d 43, 50, 53-4 (2nd Cir. 1999) (stating that “Congress assigned to the Federal Communications Commission . . . exclusive authority to grant licenses under the act” and “[t]he FCC’s exclusive jurisdiction extends not only to the granting of licenses, but to the conditions that may be placed on their use”); *United States v. Southwestern Cable Co.*, 392 U.S. 157, 168 (1968) (“The Commission was expected to serve as the single Government agency with unified jurisdiction and regulatory power over all forms of electrical communication, whether by telephone, telegraph, cable, or radio. It was for this purpose given broad authority.”) (internal quotations omitted).

^{9/} See, e.g., *Mobile Relay Assocs. v. FCC*, 457 F.3d 1, 8 (D.C. Cir. 2006) (“We have previously declared that if the Commission is ‘fostering innovative methods of exploiting the spectrum,’ it ‘functions as a policymaker’ and is ‘accorded the greatest deference by a reviewing court.’”); *Teledesic LLC v. FCC*, 275 F.3d 75, 84 (D.C. Cir. 2001) (“The Commission is therefore entitled to the deference traditionally accorded decisions regarding spectrum management”).

^{10/} See *5.9 GHz Order* ¶ 13.

the public interest by authorizing a portion for unlicensed use.^{11/} As the Commission explained, unlicensed devices that use technologies such as Wi-Fi have become indispensable for providing cost-effective connectivity to millions of Americans and demand for these technologies has far outpaced available and suitable spectrum.^{12/} The Commission routinely makes those types of evaluations, balances competing interests, and repurposes spectrum accordingly. Indeed, the Commission recently repurposed portions of the 3.5 GHz band and 6 GHz band for licensed-by-rule or unlicensed operations based on demand and its statutory authority to manage spectrum in the public interest.^{13/}

AREDN argues that the *5.9 GHz Order* contravened the Commission’s authority because it sets new ITS standards – a role reserved for the Department of Transportation (“DoT”).^{14/} AREDN misconstrues the Commission’s action. *First*, the *5.9 GHz Order* did not set or modify standards promulgated by DoT. As noted above, it merely repurposed a part of the 5.9 GHz band for unlicensed indoor operations while preserving the rest of the band for continued ITS operations.^{15/} Indeed, as AREDN itself recognizes, the only reason that ITS had access to the 5.9

^{11/} See *id.* ¶¶ 2, 5, 13, 25.

^{12/} See *id.* ¶¶ 2, 5.

^{13/} See, e.g., *Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, Report and Order and Further Notice of Proposed Rulemaking, 30 FCC Rcd 3959 (2015); *Unlicensed Use of the 6 GHz Band; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, Report and Order, 35 FCC Rcd 3852 (2020) (“*6 GHz Order*”) (authorizing unlicensed use in the 6 GHz band where it was not previously authorized); see also *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC 6567 (2014) (“*Broadcast Incentive Auction Order*”) (adopting rules for reallocating traditional over-the-air TV broadcast spectrum); *Expanding Flexible Use in the 3.7-4.2 GHz Band*, Report and Order, 35 FCC Rcd 2343 (2020) (adopting rules to repurpose the C-band and relocate existing satellite operations).

^{14/} See AREDN Petition for Recon. at 11 (“[T]he Order . . . outlaws DSRC (the incumbent standard previously chosen by DOT), [and] imposes a new standard (C-V2X) over DOT’s objection[.]”).

^{15/} See *5.9 GHz Order* ¶¶ 13, 110.

GHz band is because DoT sought that access and the Commission granted it.^{16/} Just as the Commission had the authority to designate the entire spectrum band for ITS operations in the first place, it has the authority to withdraw that designation if it determined that doing so was in the public interest.^{17/} AREDN effectively asserts that once the Commission made the decision to designate spectrum for ITS, the Commission's hands became tied, and it could not *re-designate* the use of that spectrum without contravening DoT authority. But that is a conclusion contrary to law. That the Commission once chose to allocate some portion of the 5.9 GHz band to ITS operations and issue licenses to DSRC technology does not mean that it has surrendered, in perpetuity, its authority to manage that spectrum.

Second, while the law directs DoT to set ITS standards, it does *not* give DoT authority to dictate spectrum allocations. The provisions of law cited by AREDN contain no reference to the 5.9 GHz band, any specific spectrum bands, or even radiofrequency spectrum. The authority to manage and allocate spectrum for non-federal purposes rests exclusively with the Commission – not DoT.

AREDN may be disappointed with the Commission's decision not to completely adhere to DoT's recommendations for use of the 5.9 GHz band, but that is not what the Communications Act demands or requires. Instead, the Commission, when determining how spectrum is allocated, must ground its decisions in an analysis of the broader public interest.^{18/} And that is exactly what occurred in the *5.9 GHz Order*. The Commission's decision to provide

^{16/} See AREDN Petition for Recon. at 9-11 (recounting the chronology of ITS in the 5.9 GHz band).

^{17/} See, e.g., 47 U.S.C. §§ 151, 154(i), 301, 302, 303, 309, 316 and 332.

^{18/} See, e.g., *United Tel. Co. of the Carolinas, Inc. v. FCC*, 559 F.2d 720, 723 (D.C. Cir. 1977) (noting that “[t]he purpose of the [Communications] Act is to protect the public interest”); see also *Scripps-Howard Radio v. FCC*, 316 U.S. 4, 14 (1942) (“The purpose of the [Communications] Act was to protect the public interest in communications.”).

unlicensed use of the 5.850-5.895 GHz sub-band was the result of a comprehensive rulemaking process – a process in which AREDN actively participated.^{19/} The Commission appropriately identified an urgent need for unlicensed spectrum to keep Americans connected, thoroughly reviewed the history of ITS operations in the 5.9 GHz band, and carefully assessed DoT and public input as well as the impact on consumers and incumbent operations from a reallocation of the spectrum.^{20/} AREDN has provided no new evidence or arguments why the Commission’s analysis was incorrect in light of changed circumstances or facts, new evidence, or some other factor that requires reconsideration of its decision.^{21/}

B. The Law Does Not Require the Commission to Designate Any of the 5.9 GHz Band for ITS

Congress has provided no direction that contravenes the broad spectrum management authority provided to the Commission to make the decisions it did in the *5.9 GHz Order*. If Congress had intended to mandate that DoT have access to the 5.9 GHz band, or any particular spectrum, it could and would have stated that. Indeed, Congress routinely directs the Commission to reserve or reallocate a portion of spectrum for particular uses when it determines doing so would serve the public interest. For example, Congress previously reserved spectrum exclusively for public safety uses like in the case of FirstNet spectrum.^{22/} It also directed the Commission to repurpose spectrum used by broadcasters for commercial wireless services and

^{19/} See Comments of The Amateur Radio Emergency Data Network, ET Docket No. 19-138 (filed Feb. 7, 2020) (“AREDN Comments”); *see also* Reply Comment of The Amateur Radio Emergency Data Network, ET Docket No. 19-138 (filed Apr. 27, 2020) (“AREDN Reply Comments”).

^{20/} See, e.g., *5.9 GHz Order* ¶¶ 2-3, 19, 36, 44.

^{21/} See 47 C.F.R. § 1.429(b).

^{22/} See Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 (2012); *Implementing Public Safety Broadband Provisions of the Middle Class Tax Relief and Job Creation Act of 2012*; *Implementing A Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, et al*, Report and Order, 27 FCC Rcd 10953 (2012).

repack remaining broadcasters in a different portion of the band.^{23/} It did not do so here, and absent that requirement, the Commission may, consistent with the Communications Act, reallocate spectrum use as it determines is in accordance with the public interest.^{24/}

To the extent it was required to consult with DoT regarding ITS needs under the Transportation Equity Act, the Commission did just that. DoT argued that the Commission should maintain the full 75 megahertz of the 5.9 GHz band for ITS purposes.^{25/} DoT also advocated for a neutral approach between DSRC and C-V2X technology.^{26/} But far from ignoring DoT’s comments in this proceeding, as ARDEN suggests,^{27/} the Commission thoroughly considered the input provided by DoT and appropriately rejected it.^{28/} It explained that based on its analysis of the technology, 30 megahertz would be sufficient for C-V2X to deploy at sufficient scale for the testing and deployment of safety applications.^{29/} As the Commission observed, “the [Transportation Equity Act for the 21st Century (‘TEA’)] did not *require* that the Commission designate the 5.9 GHz band – or any band – for ITS, only that the Commission *consider* doing so.”^{30/} In other words, the TEA merely required the Commission to complete a rulemaking, which is exactly what it did.^{31/}

^{23/} See *id.* §§ 6402, 6403, 126 Stat. 156 (2012) (codified at 47 U.S.C. § 309(j)(8)(G) and 47 U.S.C. § 1452, respectively); see also *Broadcast Incentive Auction Order*.

^{24/} See, e.g., 47 U.S.C. § 303.

^{25/} See *5.9 GHz Order* ¶¶ 19, 36.

^{26/} See *id.* ¶¶ 99 n.260, 106.

^{27/} See *AREDN Petition for Recon.* at 11.

^{28/} See *5.9 GHz Order* ¶¶ 19, 36, 38, 44 (including approximately 56 references to the Department of Transportation and 20 citations to DoT comments).

^{29/} See *id.* ¶ 36.

^{30/} *Id.* ¶ 123 (*emphasis added*).

^{31/} See *Amendment of Parts 2 and 90 of the Commission’s Rules to Allocate the 5.850-5.925 GHz Band to the Mobile Service for Dedicated Short Range Communications of Intelligent Transportation Services*, Report and Order, 14 FCC Rcd 18221 (1999).

C. There is no Evidence of Potential Harm to Amateur Operations

AREDN's arguments suggest that it expects to succeed on the merits because the Commission incorrectly gauged whether there would be harmful interference to Amateur Service operations. But AREDN will fail on the merits of those arguments also. To succeed, AREDN was required to demonstrate material error in the underlying order, raise facts not known or in existence at the time of the order, or show that reconsideration is required by public interest.^{32/} AREDN does not make that demonstration. The Commission directly addressed Amateur Service interference concerns in the *5.9 GHz Order*, concluding that unlicensed devices operating in 5.9 GHz lower sub-band "will not cause harmful interference to amateur operations because of the relatively low power with which [unlicensed] devices will operate as compared to amateur stations, which are permitted to operate with as much as 1.5 kW (62 dBm) peak envelope power."^{33/} More importantly, the Commission noted that Amateur Service proponents did "not include any specific technical analysis for their particular position" that the Commission should abandon its proposal to authorize unlicensed operations in the 5.9 GHz band.^{34/} Rather than demonstrate why this analysis is incorrect or provide any new technical data or evidence, which the Commission specifically noted was lacking, AREDN simply reasserts that it faces harmful interference from unlicensed operations and focuses solely on the Commission's purported lack of authority to adopt the *5.9 GHz Order*.^{35/} These claims do not merit reconsideration of the *5.9 GHz Order* and therefore do not support AREDN's Petition.

^{32/} 47 C.F.R. § 1.429(b).

^{33/} *5.9 GHz Order* ¶ 93.

^{34/} *Id.* ¶ 92.

^{35/} AREDN Petition for Recon. at 8, 16; Petition at 5-10.

III. THERE WILL BE NO IRREPARABLE HARM

While AREDN's failure to demonstrate that its Petition is likely to succeed on the merits is sufficient reason to deny its Petition, AREDN also does not demonstrate that it would suffer irreparable harm in the absence of a stay. An injury qualifies as "irreparable harm" only if it is "both certain and great; it must be actual and not theoretical."^{36/} Therefore, to demonstrate irreparable harm, AREDN must provide "proof indicating that the harm [it alleges] is certain to occur in the near future."^{37/} The Commission has previously noted that a successful showing of irreparable harm is "a prerequisite for obtaining" a stay.^{38/} AREDN cannot demonstrate this and does not even try.

AREDN argues that it faces irreparable harm because absent a stay, it faces harmful interference from the newly authorized unlicensed devices in the 5.9 GHz band. It suggests the harm will be imminent because the *5.9 GHz Order* provides for immediate use of the band by unlicensed indoor devices and authorizes full-power unlicensed outdoor operations after the one-year ITS transition period and other interference rules are adopted.^{39/} As noted above, that assertion is premised on AREDN being right on the merits – that there *will* be harmful interference to Amateur Service operations. But AREDN has failed to demonstrate that will be true. The rules the Commission adopted are designed to limit interference and protect

^{36/} *Wisconsin Gas Co. v. FERC*, 758 F.2d 669, 674 (D.C. Cir. 1985) (additionally, to warrant a stay, the harm must be shown to be "of such imminence that there is a 'clear and present' need for equitable relief to prevent irreparable harm") (internal citations omitted).

^{37/} *See Wisconsin Gas*, 758 F.2d at 674.

^{38/} *2010 Siting Review Order* ¶ 7.

^{39/} Petition at 5; *5.9 GHz Order* ¶ 59.

incumbents, and AREDN has not demonstrated any flaws in the Commission’s adoption of those rules.^{40/}

AREDN asserts that the Commission should “recognize potential harmful interference” to AREDN because it “operates fixed links similar to those that are protected in the 6 GHz proceeding.”^{41/} AREDN’s argument demonstrates why it is wrong. *First*, the Commission found that there would be *no* interference by unlicensed devices to fixed links in the 6 GHz band.^{42/} Accordingly, AREDN relies on an inaccurate premise. *Second*, AREDN erroneously claims increased potential for line-of-sight interference.^{43/} But the line-of-sight from indoor unlicensed devices to Amateur Service reception is not possible. In the *5.9 GHz Order*, only *indoor* operations were permitted – outdoor operations are the subject of Commission inquiry in the *Further Notice of Proposed Rulemaking*. Accordingly, AREDN’s assertion that the same threats of interference exist in the 5.9 GHz band as those the Commission identified in the 6 GHz band is frivolous. Moreover, the FCC noted that even outdoor operations in the 6 GHz band would pose minimal risk of interference.^{44/} Thus, even if AREDN had drawn an appropriate analogy, its claim of harm would be unlikely.

In any case, AREDN has ample opportunity to provide comment to the Commission in this proceeding on the questions of outdoor unlicensed technical parameters.^{45/} In the meantime, any threat to its outdoor operations from unlicensed devices operating in the 5.9 GHz band is

^{40/} *5.9 GHz Order* ¶¶ 60-61, 65-66.

^{41/} Petition at 9.

^{42/} *6 GHz Order* ¶¶ 75-76, 139, 143.

^{43/} Petition at 6.

^{44/} *See 6 GHz Order* ¶ 143.

^{45/} *See 5.9 GHz Order* ¶¶ 176-185.

hardly “imminent.” And while the Commission has stated that outdoor operations may be permitted through the use of special temporary authority (“STA”) or other avenues,^{46/} AREDN has not demonstrated that those requests are likely to be imminent or cause irreparable harm. Indeed, Commission consideration of those requests can permit a case-by-case analysis to meet precisely AREDN’s concerns.

AREDN further argues that it faces irreparable harm without a stay because under the 5.9 GHz Order, non-commercial operations like AREDN’s operate at a competitive disadvantage with regard to siting when compared to unlicensed operations and cannot simply construct an intermediate node if there is a problem with reception.^{47/} Again, this is speculative harm at best. As AREDN recognizes, the Amateur Service is an allocated service that is entitled to interference protection within the 5.9 GHz band whereas unlicensed devices are not. Operators of unlicensed devices are therefore bound by the Commission’s rules not to cause harmful interference regardless of their business arrangements with site owners. That a site owner may give preferential treatment to an unlicensed operator is beside the point – those operators are not permitted to cause harmful interference to Amateur Service operations and, as noted above, there is no indication that they will.

Notably, AREDN concedes that any potential harm its members would suffer is not “irreparable.” For example, it recognizes that the Commission “could bring enforcement actions” against commercial unlicensed operators.^{48/} And while individually purchased devices would still be on the market, AREDN fails to consider that manufacturers could push software or

^{46/} See *id.* ¶¶ 24, 59, 86.

^{47/} Petition at 7.

^{48/} *Id.* at 5.

firmware updates to those devices that could prevent them from using the lower 5.9 GHz band.

Indeed, the Commission has recognized such fixes in the past.^{49/}

IV. A STAY WILL HARM OTHER INTERESTED PARTIES

AREDN argues that proponents of unlicensed operation will not face any harm from “stay of a rule that is inconsistent with law and will be overturned at some point.”^{50/} As demonstrated above, the *5.9 GHz Order* is consistent with law and is unlikely to be overturned. Moreover, the harm that the American public will suffer without lack of access to additional spectrum for unlicensed devices will be immediate and real. The FCC identified that demand for spectrum to support unlicensed use has increased significantly.^{51/} Among the many examples, Wi-Fi Alliance has noted that the fifth generation of wireless technology (“5G”) relies on Wi-Fi availability significantly more than past generations – with 71% of mobile traffic expected to be offloaded to Wi-Fi.^{52/} And overall offload to Wi-Fi is expected to reach 59% globally, and 76% in North America by 2022.^{53/}

^{49/} See, e.g., *Ubiquiti Inc.*, Order and Consent Decree, 35 FCC Rcd 11673, 11677 ¶ 6 (2020) (detailing that in 2019 Ubiquiti attempted to correct a violation of Commission marketing rules by pushing a firmware update to non-compliant access point devices); see also Comments of Wi-Fi Alliance, ET Docket No. 19-138, at 5-6 (filed Mar. 9, 2020) (stating that “one of the benefits of designating the U-NII-4 band for Wi-Fi is that the adjacent spectrum in U-NII-3 is already designated for that use, meaning that existing equipment can be modified to take advantage of wider bandwidths and offer higher data rates. Some of these modifications can, subject to compliance with the Commission’s equipment authorization rules, be accomplished with remote software updates.”).

^{50/} Petition at 14.

^{51/} See *5.9 GHz Order* ¶ 15.

^{52/} See, e.g., Letter from Alex Roytblat, Senior Director of Regulatory Affairs, Wi-Fi Alliance, to Marlene Dortch, Secretary, FCC, ET Docket No. 18-295 and GN Docket No. 17-183 (filed May 2, 2019) at Attachment, at 2; Cisco VNI Mobile (Mar. 2019) (“2019 Cisco VNI”), https://www.cisco.com/c/dam/m/en_us/network-intelligence/service-provider/digital-transformation/knowledge-network-webinars/pdfs/190320-mobility-ckn.pdf.

^{53/} See, e.g., Letter from Paul Margie Counsel to Apple Inc., et. al., to Marlene Dortch, Secretary, FCC, ET Docket No. 18-295 and GN Docket No. 17-183 (filed Apr. 26, 2019) at Attachment, at 4; 2019 Cisco VNI at 9-10.

The pandemic has exacerbated the reliance on Wi-Fi for households and businesses.^{54/} The record is replete with data regarding the need for additional wireless capacity in general and unlicensed capacity in particular based on the current and anticipated shortage of unlicensed spectrum capacity. Many providers have reported large increases in demand for Wi-Fi for various uses, such as gaming, streaming, and virtual private networks, and Wi-Fi offloading.^{55/} This increased demand is likely to continue even in a post-pandemic environment as some of the changes that pandemic has wrought, such as working from home, are likely to persist.

Every day of delay – as AREDN has requested – will impede the Nation’s efforts to remain connected. And, because of the nature of next-generation wireless technologies, the goal is not merely to keep up with, but to stay ahead of, connectivity demands. A stay will harm the Wi-Fi industry’s ability to respond to these needs by disrupting investment, development, equipment authorization, and other approval processes.

V. THE PUBLIC INTEREST FAVORS DENIAL OF THE STAY REQUEST

Finally, in order for the Commission to grant a stay request, it must find that the petitioner has demonstrated that the stay would be in the public interest. The opposite is true

^{54/} See 5.9 GHz Order ¶ 15; see also *Keeping the Internet Up and Running in Times of Crisis*, OECD (May 4, 2020), https://read.oecd-ilibrary.org/view/?ref=130_130768-5vgoglwswy&title=Keeping-the-Internet-up-and-running-in-times-of-crisis (“Since the start of the COVID-19 crisis, demand for broadband communication services has soared, with some operators experiencing as much as a 60% increase in Internet traffic compared to before the crisis.”); Rachel Morison, ‘*A Month of Sundays*,’ *Electricity use Data Reveals Secrets of Coronavirus Lockdown Lifestyle*, FORTUNE (Apr. 22, 2020, 9:00 AM), <https://fortune.com/2020/04/22/electricity-use-data-secrets-coronavirus-lockdown-lifestyle/> (“Internet traffic is skyrocketing, with a surge in bandwidth-intensive applications like streaming services and Zoom. This may mean that monthly broadband consumption of as much as 600 gigabytes, about 35% higher than before, according to Bloomberg Intelligence.”).

^{55/} See 5.9 GHz Order ¶ 16 (“AT&T reported a 76% over-the-average increase in Wi-Fi calling minutes ... Comcast’s Xfinity Mobile has seen a 49% increase in its Wi-Fi off-loading from its mobile devices. Verizon has reported week-over-week increases during peak hour usage with a 75% increase for gaming, 34% increase for virtual private networks (VPNs), 20% increase in web traffic, and 12% increase in video streaming.”).

here. The *5.9 GHz Order* is in the public interest and the Commission demonstrated that based on an extensive record. As explained above, the public interest will be served by making available much needed spectrum now for unlicensed devices to meet the growing demands for next-generation wireless uses. On the other hand, issuing a stay and preserving its use for ITS would delay the economic benefits of the transition – a conservatively estimated \$17.2 billion over the years 2023-2025.^{56/} As the Commission observed, the full 75 megahertz of the 5.9 GHz band is not necessary for proper functionality of ITS and has not been optimally used by ITS proponents despite their years of arguing that it would.^{57/} Based on the Commission’s detailed analysis of the various interference studies and comments it reviewed, determination that ITS and other incumbents in the 5.9 GHz band would be protected,^{58/} and decision not to allow widespread outdoor unlicensed operations in the 5.350-5.895 GHz range until ITS operations in that band have ended,^{59/} the Commission struck the proper balance in finding the public interest would be better served by reallocating a portion of the band for unlicensed operations, and AREDN should not be permitted to disturb that balance.

VI. CONCLUSION

For the foregoing reasons, the Petitioner’s request for a stay of the *5.9 GHz Order* should be denied.

Respectfully submitted,

/s/ Alex Roytblat

Alex Roytblat

^{56/} See *id.* ¶¶ 125-126, 133-35.

^{57/} See *id.* ¶¶ 42-47.

^{58/} *Id.* ¶¶ 42-47.

^{59/} See *id.* ¶¶ 24, 59, 86.

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CERTIFICATE OF SERVICE

I, Jonathan P. Garvin, hereby certify that on May 10, 2021 a copy of the foregoing Opposition to Petition for Stay by Wi-Fi Alliance was served by electronic mail^{1/} on the following:

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^{1/} Pursuant to Section 1.47(d) of the FCC's rules, the party to be served may agree to accept service in an alternative form. *See* 47 C.F.R. § 1.47(d). Counsel for AREDN has agreed to service by electronic mail of this Opposition.